

REMARKS

The Examiner has rejected claims 1-21 and 23-64 under 35 USC 102. These rejections are fully traversed below. In addition, Applicant has amended the claims to correct various typographical errors and to further clarify the subject matter regarded as the invention.

Claims 65-72 have been added. Claims 1-21 and 23-72 are now pending.

Reconsideration of the application is respectfully requested based on the following remarks.

I. REJECTIONS OF CLAIMS 1-60 UNDER 35 U.S.C. § 102

Claims 1-21 and 23-60 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,031,841 (Woundy). Applicant respectfully traverses this assertion.

Each of the pending claims, as amended, recites a method, system, apparatus, or computer-readable medium for:

obtaining a message at the cable head end, wherein the message is received from one of the cable modems or is to be transmitted to one of the cable modems;

determining whether the message meets filtering criteria; and

when the message meets the filtering criteria, copying the message including a payload and sending the copied message including the payload to a memory device such that the copied message including the payload is stored at the memory device;

wherein the obtaining, determining, copying and sending steps are performed by the cable head end.

As recited in the pending claims, the message that is “filtered” is obtained at the cable head end. Moreover, each of the claimed steps is performed by the cable head end.

Woundy generally relates to dynamic resource reservation for upstream data traffic in a broadband cable system. More specifically, Woundy provides upstream bandwidth resource reservation which allows packet scheduling to occur at a cable head end, and packet classification to occur at a cable modem. See Abstract.

As set forth above, Woundy requires that specific processes be performed both at the cable head end and at the cable modem. The Examiner refers to FIG. 2, blocks 202 and 204 and col. 3, lines 1-9. Specifically, Woundy discloses that “[t]he cable head end will intercept the downstream RSVP Path message at block 202, store the path state from the message at block 204...” The cable head end intercepts a path message at 202. However, it is important to note that what is stored in Woundy is the “path state,” and not the “path message.” In other words, Woundy neither discloses nor suggests that what the cable head end stores is the message that is transmitted to the cable modem, where the message includes a payload.

In addition, it is important to note that Woundy fails to disclose or suggest “determining whether the message meets filtering criteria” and “when the message meets the filtering criteria, copying the message including a payload and sending the copied message including the payload to a memory device such that the copied message including the payload is stored at the memory device.” In fact, the Examiner has previously acknowledged that “it is not indicated what criteria is filtered.” Applicant respectfully asserts that the cable head end of Woundy does not determine whether the

message meets specific filtering criteria before storing the path state. In fact, it is clear that the cable head end does not filter the path messages in any manner.

In the recent Office Action, the Examiner asserts that “Examiner interprets the “filtering criteria” as “Service ID” which is indicated in specification, page 12, lines 18-22.” However, nothing in Woundy indicates “determining whether the message meets filtering criteria; and when the message meets the filtering criteria, copying the message including a payload and sending the copied message including the payload to a memory device such that the copied message including the payload is stored at the memory device.” Rather, col. 3, lines 1-9 of Woundy discloses that “[t]he cable head end will intercept the downstream RSVP Path message at block 202, store the path state from the message at block 204...” Accordingly, it is clear from col. 3, lines 1-9 of Woundy that Woundy stores the path state unconditionally. In other words, Woundy does not determine whether the message meets particular filtering criteria before it stores the path state. Stated another way, it appears that Woundy always stores the path state of the RSVP Path message, and therefore such a determination does not control whether the path state of the RSVP Path message is stored. There appear to be no conditions that would prevent the path state of the RSVP Path message from being stored in Woundy.

The Examiner asserts that the cable head end determines whether the message meets filtering criteria, citing col. 1, lines 32-45 and col. 2, lines 15-20 of Woundy. However, it is important to note that Woundy fails to disclose such a determination. Moreover, Woundy fails to disclose or suggest copying the message and sending the message to a memory based upon the result of such a determination. The Examiner asserts that Woundy teaches “that packet classifier determines QOS class of packet and uses a SID in filter spec to match particular source IP address.” However, col. 1, lines 32-45 of Woundy, as cited by the Examiner, state “the present invention provides upstream

bandwidth resource reservation which allows packet scheduling to occur at the CMTS, and packet classification to occur at a CM.” Thus, col. 1, lines 32-45 of Woundy clearly shows that any packet classification is performed at the Cable Modem, not the cable head end. Nothing in the cited portions discloses or suggests a packet classifier that operates at the CMTS.

The Examiner further cites col. 2, lines 15-20, which states “determining at a CMTS whether upstream resources are available. If so, a SID message is generated at the CMTS to indicate at least one filter spec parameter responsive to the reserved resources. Once the SID message is received at the cable modem, a filter spec parameter is set in the cable modem...” The fact that the CMTS generates a SID message based upon whether upstream resources are available neither discloses nor suggests that the CMTS determines whether the message meets filtering criteria and copies and stores the message if the message meets the filtering criteria. The determination of whether resources are available does not determine whether a message meets filtering criteria. Moreover, the CMTS of Woundy does not copy and store the message if the resources are available. The CMTS merely sends a message to the cable modem.

The Background section of Applicant’s specification addresses the need in the art for a mechanism for monitoring the data communication between a head end complex and its associated cable modems. This is accomplished in the pending claims by filtering messages that are obtained at the cable head end, where the messages are either received from cable modem(s) or to be transmitted to cable modem(s). Those messages that meet specific filtering criteria may be stored to a memory device, enabling those messages to be accessed and monitored. In this manner, communications that are communicated both upstream and downstream may be monitored.

Woundy relates to dynamic resource reservation for upstream traffic in a cable system. In other words, Woundy fails to disclose or suggest managing downstream traffic. As a result, Woundy fails to disclose or suggest capturing messages at the cable head end in order to monitor upstream and/or downstream communications. Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection of the independent claims.

The Examiner's rejections of the dependent claims are respectfully traversed. However to expedite prosecution, all of these claims will not be argued separately. Claims 2-20, 22-41, and 43-53 each depend either directly or indirectly from independent claims 1, 21, and 42 and, therefore, are respectfully submitted to be patentable over cited art for at least the reasons set forth above with respect to independent claims 1, 21, 42, and 54. Further, the dependent claims recite additional elements that when considered in the context of the claimed inventions further patentably distinguish the invention from the cited art. Withdrawal of the claim rejections is respectfully requested. Accordingly, Applicant respectfully asserts that the dependent claims are also patentable over the cited art.

II. CONCLUSION

An early Notice of Allowance is earnestly solicited. If there are any issues remaining which the Examiner believes could be resolved through either a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below.

Applicants hereby petition for an extension of time which may be required to maintain the pendency of this case, and any required fee for such extension or any further fee required in connection with the filing of this Amendment is to be charged to Deposit Account No. 504480 (Order No. CISC215).

Respectfully submitted,
Weaver Austin Villeneuve & Sampson LLP

/Elise R. Heilbrunn/
Elise Heilbrunn
Registration No. 42,649

P.O. Box 70250
Oakland, CA 94612-0250
510-663-1100, ext. 245